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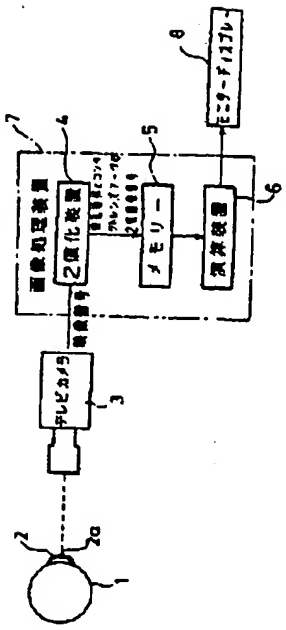
TITLE : CONTACT LENS POSITION CORRECTING DEVICE FOR MEASURING EYEBALL MOVEMENT



ABSTRACT : PURPOSE: To allow the exact measurement of eyeball movement by binarizing the video signals of a television camera, computing the deviation quantity of a contact lens from the coordinates at the two points; the centroid coordinates of the mark of the contact lens and the contour of the pupil by these signals, and correcting the data on the eyeball movement.

CONSTITUTION: The contact lens 2 having the dot-shaped mark 2a at the center of the lens is mounted in the prescribed position on the front face of the pupil of the eyeball 1 of a person to be inspected. The video signals of the motion of the eyeball having a gradation from the television camera 3 are inputted to a binarization device 4 when the eyeball movement is photographed by the television camera 3. This device outputs the binary images of the contour of the pupil and the central dot to an arithmetic unit 6. The arithmetic unit 6 successively reads out the binary images and calculate the deviation quantity of the centroid of the mark from the contour of the pupil by determining the contour coordinates at least at the two points; the coordinate of the centroid of the mark and the top, bottom, right or left of the contour of the pupil moving together with the mark when the mark 2 varies its position with the eyeball movement. The data on the eyeball movement is corrected in this way and the correct eyeball movement is displayed even if the deviation rises in the contact lens 2.